

Ginnie Contract	Shortcomings	MBS Contract
GNMA CDR	<ol style="list-style-type: none"> 1. Conversion factors across coupons - cheapest to deliver MBS was that with the highest coupon - poor hedge for current coupon. 2. Introduction of Treasury contract. 	<ol style="list-style-type: none"> 1. Conversion factors across Agencies only; not across coupons. 2. Treasury contract no longer as effective in hedging MBS basis.
GNMA CD	<ol style="list-style-type: none"> 1. Conversion factors across coupons - cheapest to deliver MBS was that with the highest coupon - poor hedge for current coupon. 2. Greater liquidity in CDR contract; marginal benefit in CD contract. 	<ol style="list-style-type: none"> 1. Conversion factors across Agencies only; not across coupons. 2. Market needs a more effective, exchange-traded hedging instrument for mortgage basis.
GNMA II	<ol style="list-style-type: none"> 1. Narrow appeal of contract, in part, due to removal of delivery option. 2. Competing Treasury and CDR contracts. 	<ol style="list-style-type: none"> 1. Contract designed to appeal to broad spectrum of mortgage market participants. 2. Market needs a more effective, exchange-traded hedging instrument for mortgage basis.
Cash Settled	<ol style="list-style-type: none"> 1. Initial introduction of monthly contracts failed to obtain significant 2. Taint of failed CDR contract 3. Poor market timing - wide MBS spreads. 	<ol style="list-style-type: none"> 1. Initial introduction of quarterly contracts to obtain critical trading mass in one contract. 2. Significant change in market size and level of sophistication, and need for better tools. 3. Propitious market timing; significant volatility.
Mortgage Backed	<ol style="list-style-type: none"> 1. Initial introduction of monthly contracts 2. Possibility of multiple contracts within the same delivery month. 3. Only marginal benefits over competing substitutes (Treasuries, futures and cash). 4. Poor market timing - low volatility. 	<ol style="list-style-type: none"> 1. Initial introduction of quarterly contracts to obtain critical trading mass in one contract. 2. One contract per delivery month. 3. Significant benefits over competing substitutes; superior hedging effectiveness, credit risk management, valuable basketing, Agency squeeze protection, ease of settlement. 4. Propitious market timing; significant volatility.

FIG. 1

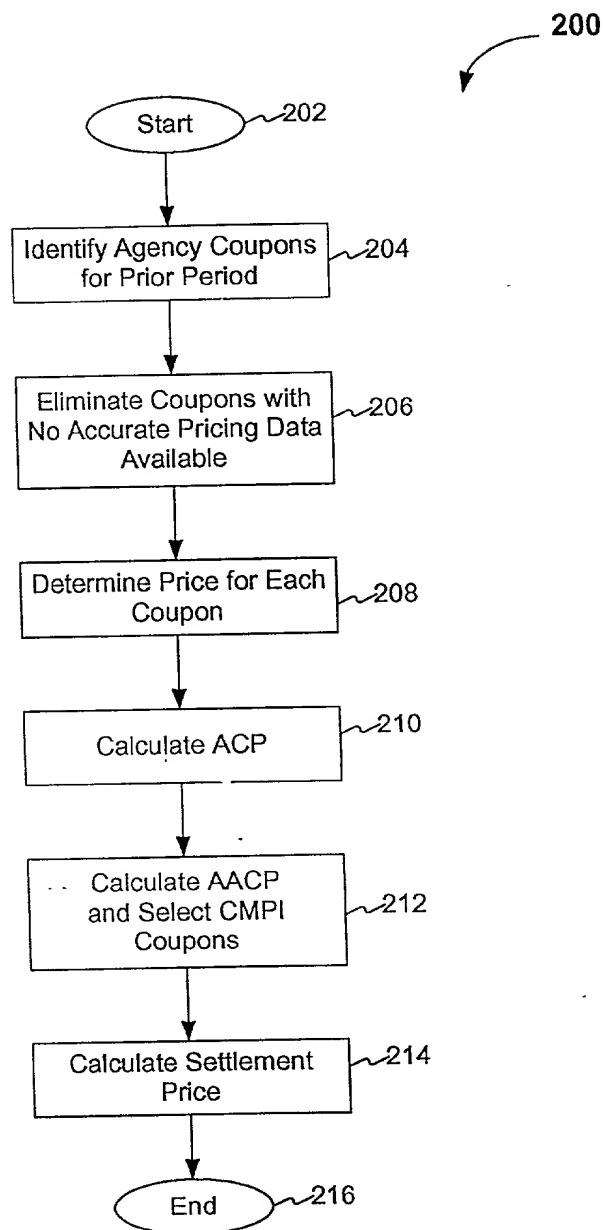


FIG. 2

FIG. 3

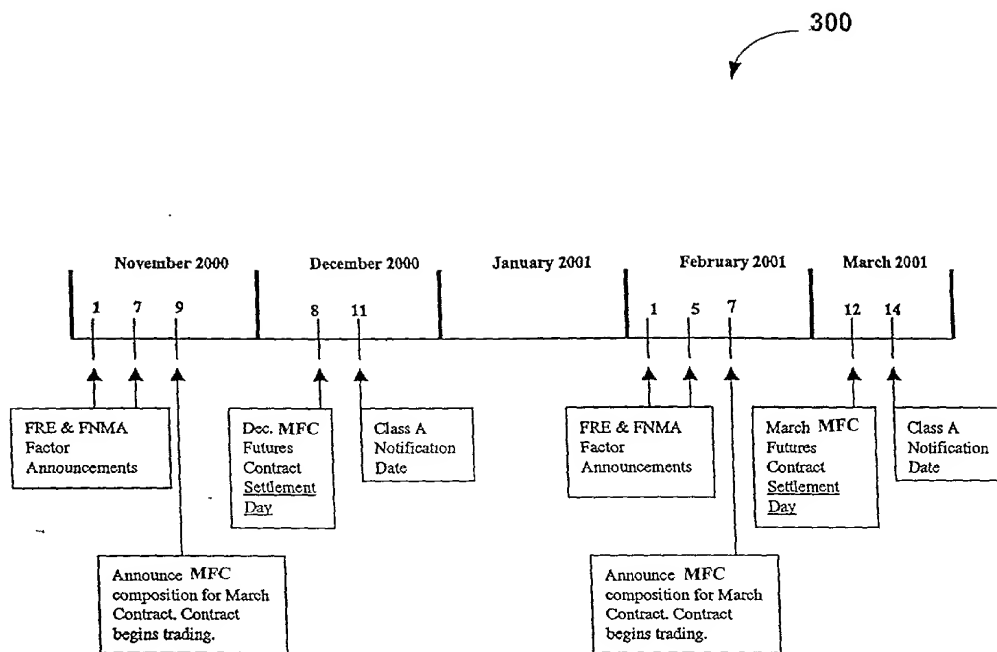


FIG. 3

Year	LBMI Price Return				SBMI Total Return				Conventional Par Price Return		
	MFC	FN Par	10 Yr Swap	10 Yr Treas	MFC	FN Par	10 Yr Swap	10 Yr Treas	MFC	10 Yr Swap	10 Yr Treas
1990	0.98	0.98	0.94	0.95	0.99	0.98	0.94	0.94	0.96	0.93	0.92
1991	0.99	0.85	0.53	0.77	0.97	0.86	0.58	0.80	0.83	0.77	0.89
1992	0.98	0.93	0.81	0.79	0.97	0.91	0.78	0.76	0.97	0.93	0.89
1993	0.79	0.64	0.53	0.47	0.83	0.66	0.54	0.51	0.88	0.95	0.73
1994	0.95	0.91	0.86	0.88	0.96	0.91	0.86	0.87	0.96	0.94	0.86
1995	0.90	0.96	0.86	0.92	0.92	0.96	0.84	0.90	0.89	0.88	0.94
1996	0.99	0.95	0.95	0.94	0.99	0.95	0.96	0.93	0.94	0.97	0.96
1997	0.99	0.99	0.88	0.92	0.98	0.98	0.86	0.90	0.97	0.93	0.95
1998	0.99	0.97	0.74	0.73	0.97	0.96	0.76	0.75	0.97	0.83	0.84
1999	0.96	0.90	0.72	0.40	0.98	0.90	0.73	0.42	0.97	0.91	0.66
90-94	0.92	0.83	0.75	0.80	0.91	0.81	0.73	0.77	0.92	0.91	0.85
95-99	0.95	0.94	0.84	0.78	0.95	0.93	0.82	0.77	0.95	0.92	0.88
90-99	0.93	0.86	0.78	0.79	0.91	0.84	0.77	0.77	0.93	0.88	0.84

FIG. 4A

FIG. 4B

Year	MFC R ²	Conventional Par Coupon R ²	Conventional Par & Swap R ²	10 Yr Swap Coeff	Conventional Par Coupon Coeff	10 Yr Swap T-Stat	Conventional Par Coupon T-Stat
1990	0.98	0.98	0.98	0.17	0.88	1.41	4.20
1991	0.99	0.85	0.88	-0.13	0.73	-1.36	4.98
1992	0.98	0.93	0.95	-0.20	0.78	-1.57	4.91
1993	0.79	0.64	0.71	-0.24	0.65	-1.39	2.33
1994	0.95	0.91	0.91	0.02	0.70	0.08	2.21
1995	0.90	0.96	0.96	0.03	0.96	0.28	5.15
1996	0.99	0.95	0.96	0.19	0.49	1.11	1.52
1997	0.99	0.99	0.99	-0.11	1.14	-1.91	10.11
1998	0.99	0.97	0.98	-0.05	0.69	-1.67	9.37
1999	0.96	0.90	0.93	-0.25	1.27	-1.94	5.12
90-94	0.92	0.83	0.83	-0.01	0.66	-0.08	5.07
95-99	0.95	0.94	0.94	-0.08	1.01	-1.58	10.40
90-99	0.93	0.86	0.86	0.06	0.61	1.29	7.85

FIG. 4C

Year	MFC R ²	Conventional Par Coupon R ²	Conventional Par & Swap R ²	10 Yr Swap Coeff	Conventional Par Coupon Coeff	10 Yr Swap T-Stat	Conventional Par Coupon T-Stat
1990	0.99	0.98	0.98	0.13	0.93	1.17	4.89
1991	0.97	0.86	0.87	-0.09	0.69	-0.93	4.56
1992	0.97	0.91	0.93	-0.20	0.74	-1.47	4.36
1993	0.83	0.66	0.74	-0.29	0.74	-1.62	2.64
1994	0.96	0.91	0.91	0.01	0.69	0.03	2.34
1995	0.92	0.96	0.96	0.00	1.07	-0.03	4.91
1996	0.99	0.95	0.96	0.28	0.31	1.72	1.02
1997	0.98	0.98	0.99	-0.15	1.19	-2.34	9.05
1998	0.97	0.96	0.96	-0.02	0.61	-0.65	6.50
1999	0.98	0.90	0.93	-0.24	1.29	-1.79	4.92
90-94	0.91	0.81	0.81	-0.02	0.66	-0.21	4.87
95-99	0.95	0.93	0.93	-0.08	1.02	-1.42	9.13
90-99	0.91	0.84	0.84	0.06	0.61	1.25	7.24

FIG. 4B

FIG. 4D

Year	MFC R ²	10 Yr Swap R ²	10 Yr Treas R ²	Treas & Swap R ²	MFC & Treas R ²	MFC & Swap R ²	MFC & Treas & Swap R ²	10 Yr Treas Coeff	MFC Coeff	10 Yr Swap Coeff	10 Yr Treas T-Stat	MFC T-Stat	10 Yr Swap T-Stat
1990	0.93	0.93	0.92	0.94	0.97	0.97	0.97	-0.09	0.68	0.25	-0.39	3.21	1.11
1991	0.77	0.77	0.89	0.89	0.91	0.92	0.92	0.20	0.71	0.18	0.54	1.88	0.77
1992	0.93	0.93	0.89	0.94	0.99	0.99	0.99	0.11	0.76	0.22	1.22	7.13	2.48
1993	0.95	0.95	0.73	0.95	0.93	0.99	0.99	-0.06	0.55	0.45	-1.03	6.12	7.83
1994	0.94	0.94	0.86	0.94	0.96	0.97	0.97	-0.20	0.73	0.35	-1.10	2.98	1.88
1995	0.88	0.88	0.94	0.95	0.99	0.98	0.99	0.32	0.45	0.02	2.78	6.50	0.19
1996	0.97	0.97	0.96	0.97	0.97	0.97	0.98	0.26	0.27	0.18	1.28	1.19	0.97
1997	0.93	0.93	0.95	0.95	0.98	0.99	0.99	0.03	0.71	0.13	0.23	4.34	1.31
1998	0.83	0.83	0.84	0.86	0.99	0.99	0.99	0.07	0.92	0.04	1.65	9.93	1.02
1999	0.91	0.91	0.66	0.93	0.99	0.99	0.99	0.06	0.64	0.11	0.67	6.15	1.02
90-94	0.91	0.91	0.85	0.91	0.94	0.96	0.96	-0.06	0.62	0.37	-0.81	8.78	6.01
95-99	0.92	0.92	0.88	0.92	0.98	0.98	0.98	0.11	0.61	0.12	2.45	13.10	2.71
90-99	0.88	0.88	0.84	0.89	0.95	0.96	0.96	-0.01	0.67	0.24	-0.15	14.29	5.68

FIG. 4E

Year	MFC R2	10YR SWAP R2	10YR TREAS R2	TREAS & SWAP R2	MFC & TREAS R2	MFC & SWAP R2	MFC & TREAS & SWAP R2	10YR TREAS T-STAT	MFC T-STAT	10YR SWAP T-STAT
1990	0.98	0.94	0.95	0.95	0.99	0.99	0.99	0.25	5.09	0.81
1991	0.99	0.53	0.77	0.86	0.99	0.99	0.99	1.19	11.24	-1.33
1992	0.98	0.81	0.79	0.82	0.98	0.98	0.98	0.19	8.88	-0.85
1993	0.79	0.53	0.47	0.53	0.79	0.80	0.81	0.61	3.38	-0.78
1994	0.95	0.86	0.88	0.89	0.95	0.96	0.96	0.30	3.58	-0.91
1995	0.90	0.86	0.92	0.93	0.98	0.98	0.98	1.37	5.51	0.56
1996	0.99	0.95	0.94	0.95	1.00	0.99	1.00	2.02	9.59	-0.79
1997	0.99	0.88	0.92	0.92	0.99	0.99	0.99	-0.04	6.93	0.34
1998	0.99	0.74	0.73	0.76	0.99	0.99	0.99	-0.72	18.43	0.94
1999	0.96	0.72	0.40	0.88	0.98	0.97	0.98	-1.82	6.67	0.83
90-94	0.92	0.75	0.80	0.80	0.93	0.92	0.93	2.53	10.18	-1.89
95-99	0.95	0.84	0.78	0.84	0.96	0.96	0.96	0.17	12.32	1.14
90-99	0.93	0.78	0.79	0.81	0.93	0.93	0.93	2.52	15.07	-0.73

FIG. 4F

Year	MFC R2	10YR SWAP R2	10YR TREAS R2	TREAS & SWAP R2	MFC & TREAS R2	MFC & SWAP R2	MFC & TREAS & SWAP R2	10YR TREAS T-STAT	MFC T-STAT	10YR SWAP T-STAT
1990	0.99	0.94	0.94	0.95	0.99	0.99	0.99	-0.03	7.43	1.02
1991	0.97	0.58	0.80	0.86	0.98	0.98	0.98	0.79	6.38	-0.45
1992	0.97	0.78	0.76	0.80	0.97	0.97	0.97	-0.22	6.99	-0.58
1993	0.83	0.54	0.51	0.55	0.83	0.84	0.86	1.00	4.09	-1.21
1994	0.96	0.86	0.87	0.89	0.96	0.96	0.96	0.02	3.80	-0.83
1995	0.92	0.84	0.90	0.91	0.98	0.98	0.98	0.99	6.04	0.68
1996	0.99	0.96	0.93	0.96	1.00	1.00	1.00	0.41	8.55	0.98
1997	0.98	0.86	0.90	0.90	0.98	0.98	0.98	-0.66	6.41	0.41
1998	0.97	0.76	0.75	0.78	0.97	0.97	0.97	-0.28	7.82	0.85
1999	0.98	0.73	0.42	0.86	0.99	0.99	0.99	-1.21	9.22	0.03
90-94	0.91	0.73	0.77	0.77	0.91	0.91	0.91	1.72	9.36	-1.52
95-99	0.95	0.82	0.77	0.82	0.95	0.95	0.95	-0.16	11.65	1.10
90-99	0.91	0.77	0.77	0.78	0.92	0.92	0.92	1.49	13.68	-0.18

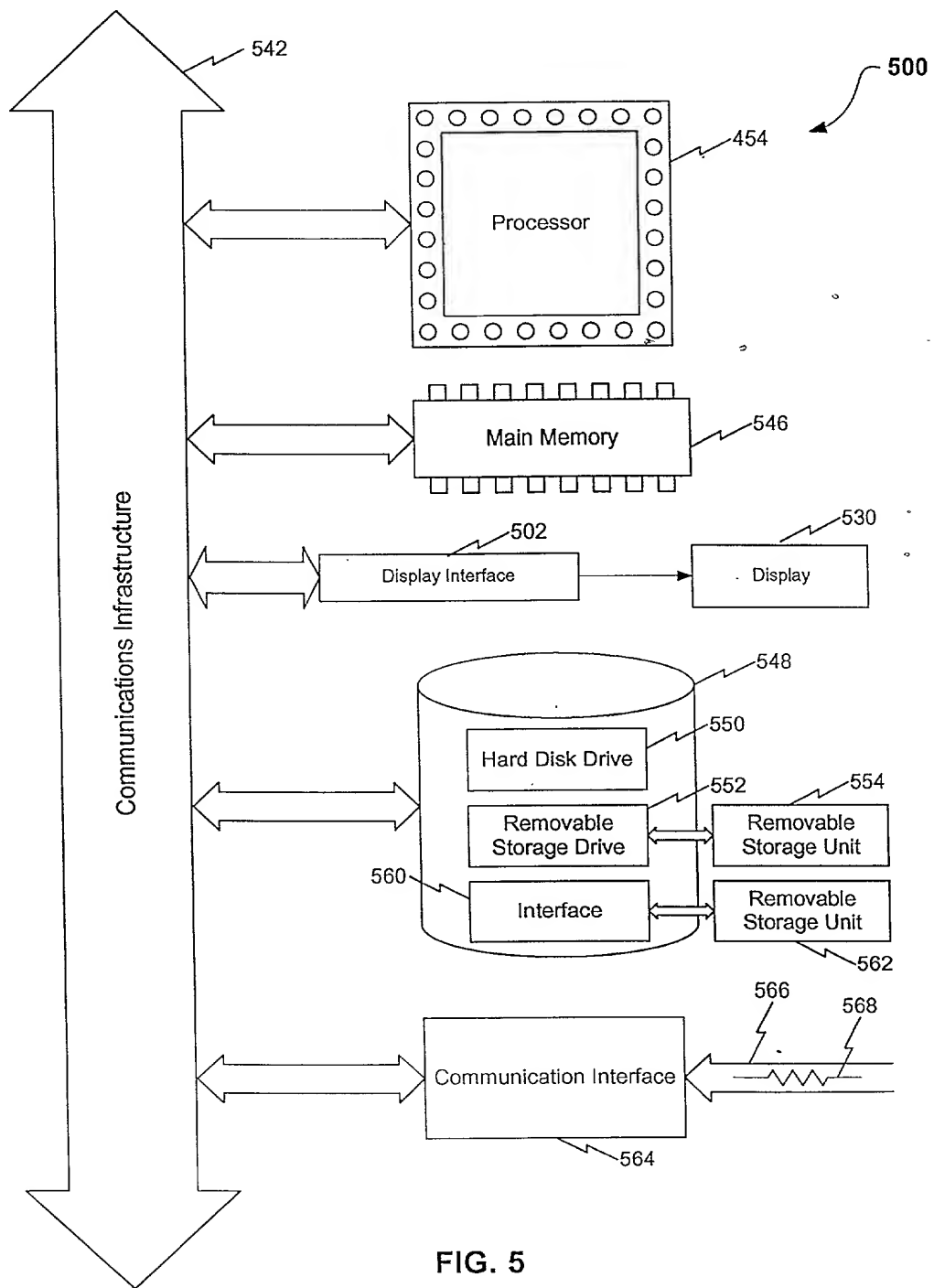


FIG. 5

0931404-081701

Contract Month	Mortgage Index Calibration Day	First Trading Day	Last Trading Day	BMA Notification Day
December 2000	8/7/00	8/9/00	12/7/00	12/11/00
January 2001	9/8/00	9/11/00	1/9/01	1/11/01
February 2001	10/6/00	10/9/00	2/6/01	2/8/01
March 2001	11/7/00	11/9/00	3/7/01	3/9/01
April 2001	12/7/00	12/11/00	4/9/01	4/11/01
May 2001	1/8/01	1/10/01	5/8/01	5/10/01
June 2001	2/7/01	2/9/01	6/7/01	6/11/01
July 2001	3/7/01	3/9/01	7/10/01	7/12/01
August 2001	4/6/01	4/10/01	8/7/01	8/9/01
September 2001	5/7/01	5/9/01	9/11/01	9/13/01
October 2001	6/7/01	6/11/01	10/9/01	10/11/01
November 2001	7/9/01	7/11/01	11/07/01	11/09/01
December 2001	8/7/01	8/9/01	12/07/01	12/11/01
January 2002	9/10/01	9/12/01	TBD	TBD
February 2002	10/5/01	10/9/01	TBD	TBD
March 2002	11/7/01	11/9/01	TBD	TBD
April 2002	12/7/01	12/11/01	TBD	TBD

Figure 6